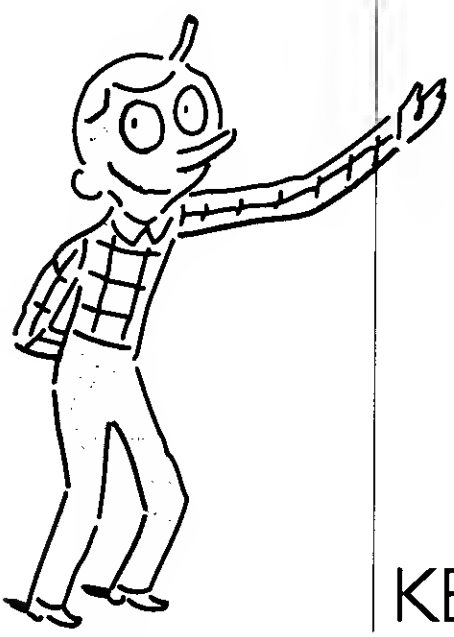
# 1 Setting up your Kenwood Audio System

## Spectrum 360



KENWOOD

## Licensing

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# Safety first

**WARNING:**
**TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.**

## Safety Symbols

We've placed these safety symbols on the back of the unit.

**CAUTION:**
To prevent electric shock, match the wide blade of the plug to the wide slot in a wall socket, and insert fully.

The lightning bolt symbol is to alert you to the danger of electric shock from the operating of electric parts inside the unit.

The exclamation point symbol is to let you know that there are important operating and servicing instructions in this manual that you should read before you operate this unit.

**Canadian IC Compliance Notice**
This device complies with RSS-210 of Industry Canada. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

**Rechargeable Battery Warning**
If this unit uses a rechargeable battery, use the battery charger that came with the unit only. Do NOT take apart, damage, burn, or short circuit the battery, or expose it to heat—this could cause it to burst or to release toxic materials. Keep the battery away from children.

### About the power supply

This unit is designed for operation in the USA and Canada using a power supply of AC 120 volts only.

### Safety Precautions

Read this page carefully to ensure safe operation.

Please read all of the safety and operating instructions before operating this unit. Adhere to all warnings on the unit and in this manual. Follow all the safety and operating instructions. These safety and operating instructions should be retained for future reference.

1 **Power sources.** The unit should be connected to a power supply only of the type described in this manual or as marked on the unit. If you are not sure of the type of power supply to your home, consult your unit dealer or local power company. For units intended to operate from battery power, or other sources, refer to the instruction manual.

2 **Power-cord protection.** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the unit.

3 **CAUTION—Polarization.** This unit may be equipped with a polarized alternating-current line plug (a plug having one blade wider that the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your outlet. Do not defeat the safety purpose of the polarized plug.

4 **Ventilation.** Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the unit and to protect it from overheating, and these openings must not be blocked or covered. The unit should be situated so that its location or position does not interfere with its proper ventilation.

To maintain good ventilation, do not put records or a table-cloth on the unit. Place the unit at least 4 inches away from the walls.

Do not use the unit on a bed, sofa, rug or similar surface that may block the ventilation openings. This unit should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

5 **Water and moisture.** The unit should not be used near water, for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

6 **Temperature.** The unit may not function properly if used at extremely low, or freezing temperatures. The ideal ambient temperature is above +41°F.

7 **Heat.** The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units (including amplifiers) that produce heat.

8 **Electric Shock.** Care should be taken so that objects do not fall and liquid is not spilled into the enclosure through openings. If a metal object, such as a hair pin or a needle, comes into contact with the inside of this unit, a dangerous electric shock may result. For families with children, never permit children to put anything, especially metal, inside this unit.

9 **Enclosure removal.** Never remove the enclosure. If the internal parts are touched accidentally, a serious electric shock might occur.

10 **Cleaning.** Unplug this unit from the wall outlet before cleaning. Do not use volatile solvents such as alcohol, paint thinner, gasoline, or benzine, etc. to clean the cabinet. Use a clean dry cloth.

11 **Lightning.** For added protection for this unit during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the unit due to lightning and power-line surges.

12 **Abnormal smell.** If an abnormal smell or smoke is detected, immediately turn the power OFF and unplug the unit from the wall outlet. Contact your dealer or nearest service center.

13 **Damage requiring service.** The unit should be serviced by qualified service personnel when:

The power-supply cord or the plug has been damaged.

Objects have fallen, or liquid has been spilled into the unit.

The unit has been exposed to rain or water.

The unit has been dropped, or the enclosure damaged.

The unit exhibits a marked change in performance.

The unit does not appear to operate normally by following the instruction manual. Adjust only those controls that are covered by the instruction manual as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the unit to its normal operation.

14 **Servicing.** The user should not attempt to service the unit beyond that described in the instruction manual. All other servicing should be referred to qualified service personnel.

15 **Power lines.** An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

16 **AC outlets.** Do not connect other audio equipment with a power consumption larger than that specified to the AC outlet on the rear panel. Never connect other electrical units, such as an iron or toaster, to it to prevent fire or electric shock.

17 **Overloading.** Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

18 **Attachment.** Do not use attachments not recommended by the unit manufacturer as they may cause hazards.

19 **Replacement parts.** When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock, or other hazards.

20 **Safety check.** Upon completion of any service or repairs to this unit, ask the service technician to perform safety checks to determine that the unit is in proper operating condition.

21 **Carts and stands.** Don't put this unit on a cart or stand that is unsteady or that can not support the unit's weight. If you move this unit on a cart or stand, be careful—quick stops, excessive force and pushing over or uneven surfaces, may cause the cart to overturn and damage your equipment.

**FCC Warning**

This equipment may generate or use radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

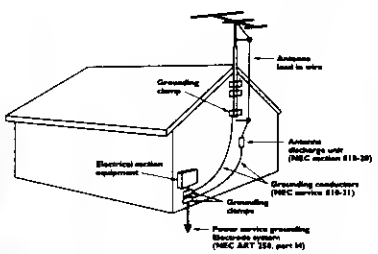
**Important**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment may cause harmful interference to radio communications if it is not installed and used in accordance with the instructions. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

**Cable System Installer Notice**

Article 820-40 of the NEC provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.



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# Welcome

Setting up your SPECTRUM System isn't difficult, but getting your system up and running will be even easier if you follow the step-by-step directions in this manual.

## Unpacking

Unpack all of the components carefully, and examine them for shipping damage. If any are damaged or fail to operate, notify your dealer immediately. If your SPECTRUM System was shipped to you directly, notify the shipping company without delay. Only the person or company who originally received the system can file a claim against the carrier for shipping damage. Keep the original carton and packing materials in case you need to transport or ship your SPECTRUM System.

## Did you get everything?

Check the lists below to make sure you have everything. And before you start setting up the system, look at the list of tools and other items you need. If you're setting up other components along with your system, read the manual that came with each of those components to see what you need.

**Receiver parts**

- Receiver (KR-597)
- Remote Control (RC-R0504)
- 2 Batteries for remote
- FM indoor antenna
- AM loop antenna
- Loop antenna stand

**CD player parts**

- CD Player (DP-R797)
- Audio cable
- System control cable

**Cassette deck parts**

- Cassette Deck (KX-W597)
- 2 Audio cables

**Equalizer Parts**

- Equalizer (KE-597)
- 2 Audio cables

**Speaker parts**

- 2 Main speakers (JL-507)
- 2 Speaker wires

**Rack parts**

- Left panel
- Right panel
- Rack base
- Rack top
- Top back panel
- Bottom back panel
- Kick panel
- Fixed shelf
- Removable shelf
- Glass door
- Hardware bag
  (see page 7 for contents of the hardware bag)

## You may need to purchase

- Audio cables
- Video cables
- Speaker wire

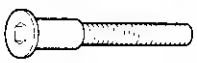
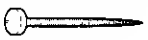
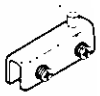
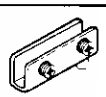
## You'll need these tools

- Screwdriver (slot and/or Phillips)
- Pliers

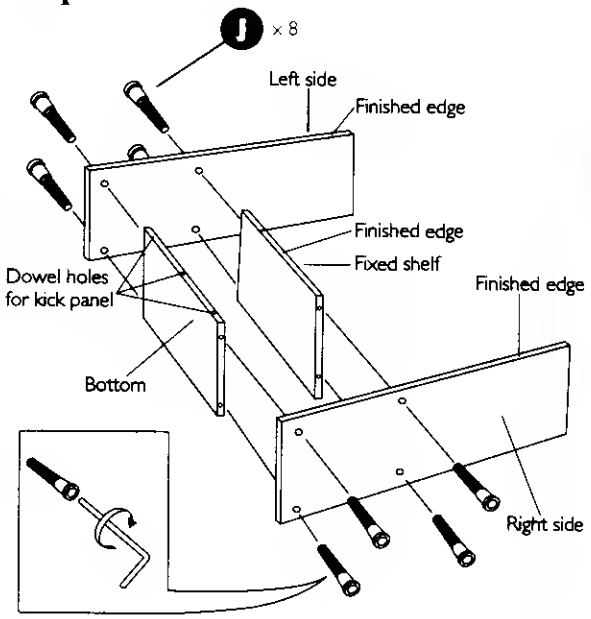
# Assembling the rack

## Hardware list

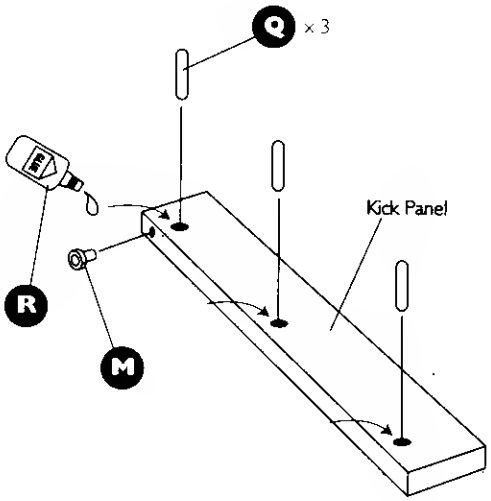
Before assembling your rack check to be sure that you received all of the hardware listed below.

| Item | Description | Quantity |
|---|---|---|
| J |  Allen bolt | 8 |
| K |  Phillips head screw | 14 |
| L | Allen wrench | 1 |
| M | Hinge insert | 2 |
| N | Magnetic catch | 1 |
| O | Wood dowel (long) | 2 |
| Q | Wood dowel (short) | 9 |
| R | Glue | 1 |
| S | Shelf pin | 4 |
| T |  Upper hinge | 1 |
| U |  Lower hinge | 1 |
| V | Catch plate | 1 |
| W | Catch plate pad | 1 |

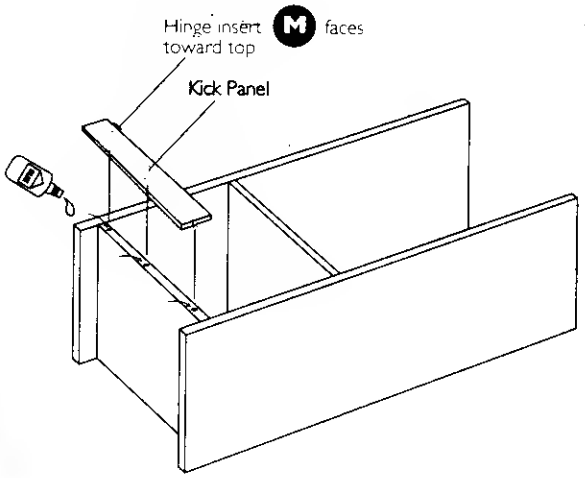
## Step 1




## Step 2



## Step 3

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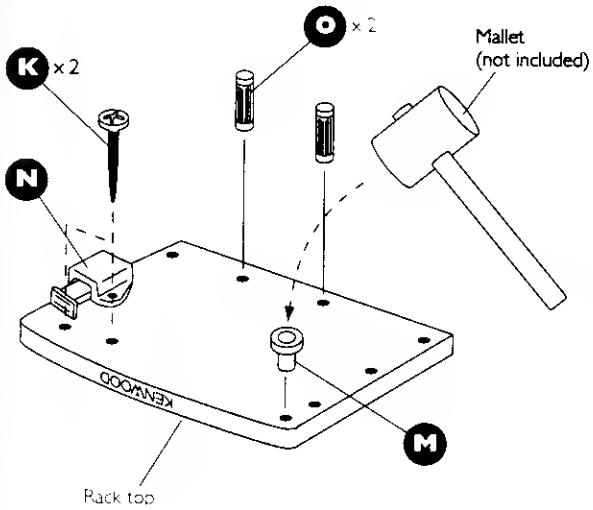


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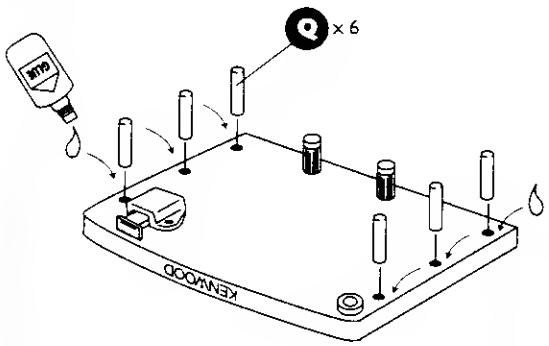


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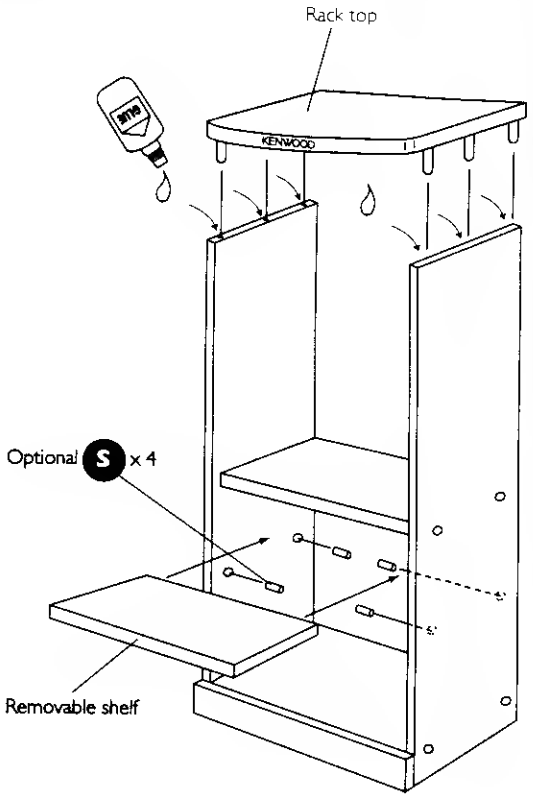
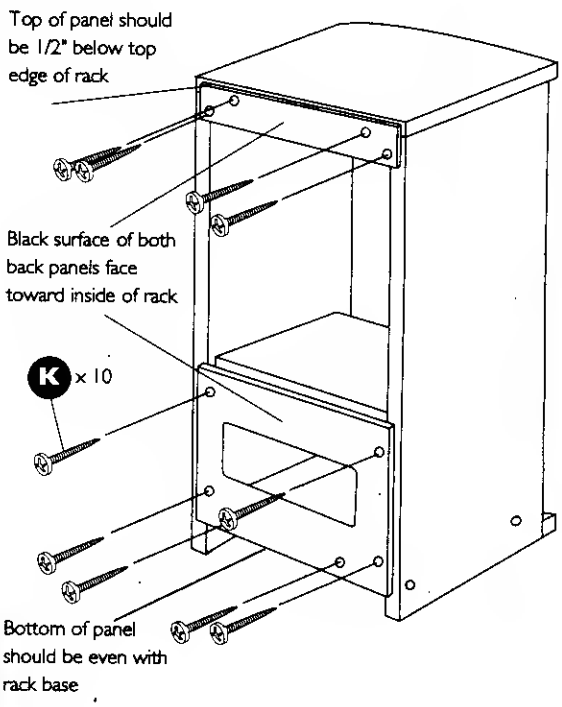
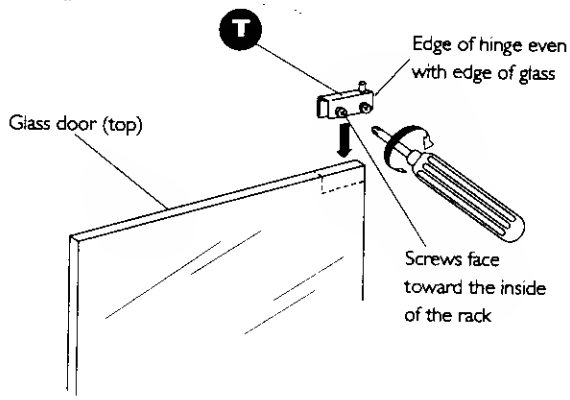


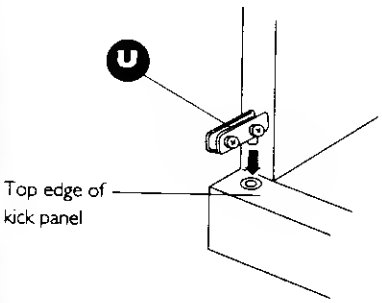

## Step 7



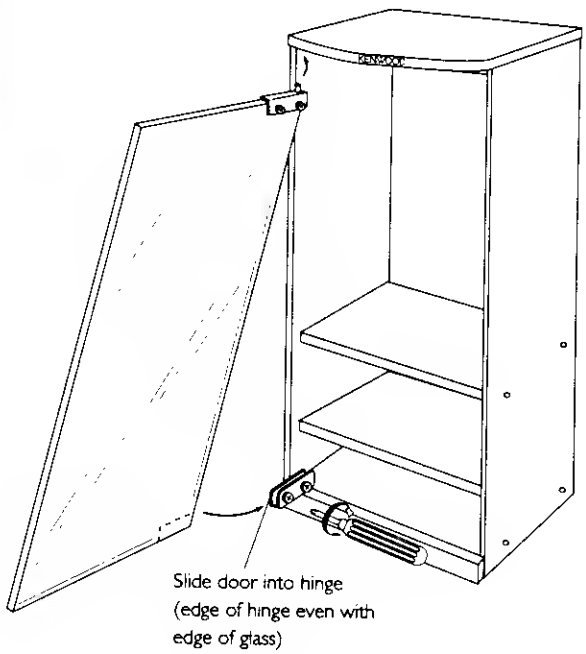
## Step 8




## Step 9




## Step 10

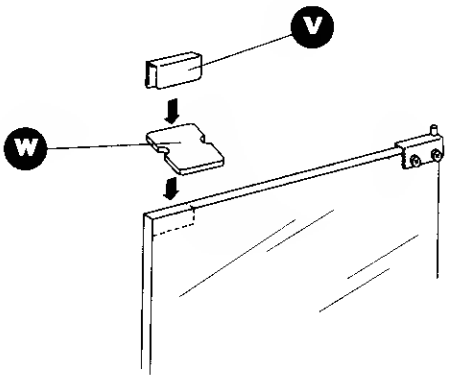



## Step 11

First close the door to see where the magnetic catch contacts it.

Attach the cushion W to the door where the magnetic catch contacted it.

Slip the catch plate V over the cushion.



# How to get replacement parts for your rack

If any of the rack parts are missing or damaged, look for the rack model number on the ID sticker on the back panel. Then, contact the following company for replacement parts.

contact:
**Tocabi America**
**755 Otay Valley Road**
**Chula Vista, CA 91911**
**(619) 661-6136**

Use the following parts list to identify missing or damaged parts:

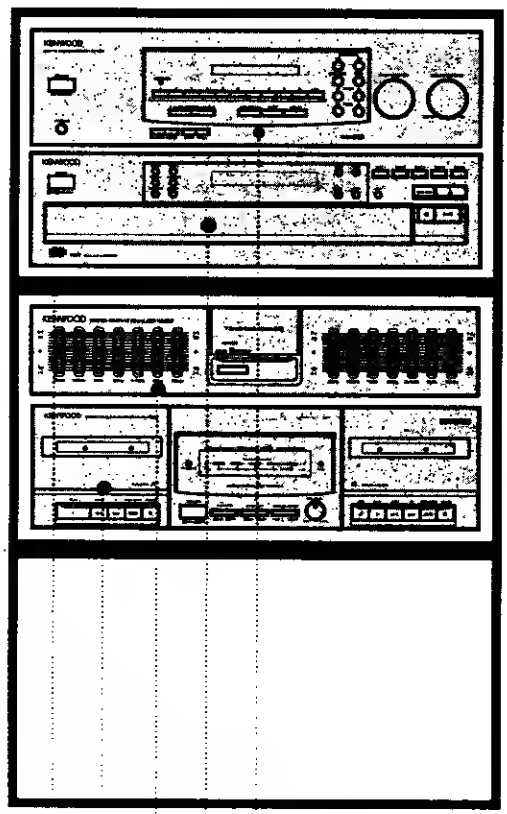
**Rack Model Number** SRC-447C

| Item | Description | Quantity | Part No. |
|---|---|---|---|
| A | Left side panel | 1 | XW1200 |
| B | Rack bottom | 1 | XW0903-1 |
| C | Right side panel | 1 | XW1199 |
| D | Kick panel | 1 | XW1201 |
| E | Rack top | 1 | XW1198 |
| F | Bottom back panel | 1 | XW0905-1 |
| G | Fixed shelf | 1 | XW0900-1 |
| H | Removable shelf | 1 | XW0901-1 |
| I | Top back panel | 1 | XW1062-1 |
| J | Allen screws | 8 | S0033 |
| K | Small screws | 14 | S0034 |
| L | Allen wrench | 1 | M0018 |
| M | Hinge inserts | 2 | P0054 |
| N | Magnetic door catch | 1 | P0098 |
| O | Long wooden dowels | 2 | W0981 |
| Q | Short wooden dowels | 9 | W0092 |
| R | Glue | 1 | G0136 |
| S | Shelf pegs | 4 | M0019 |
| T | Top door hinge | 1 | M0026 |
| U | Bottom door hinge | 1 | M0027 |
| V | Door catch plate | 1 | M0011 |
| W | Catch plate pad | 1 | G0047 |
| X | Glass door | 1 | G0241 |

# Placing your system

## Stacking your components in the rack

To make sure that they're properly ventilated and stable, stack them according to the following diagram. If you're using a turntable, place it on top of the rack.



**Receiver (KR-597)**

**CD Player (DP-R797)**

**Equalizer (KE-597)**

**Cassette Deck (KX-W597)**

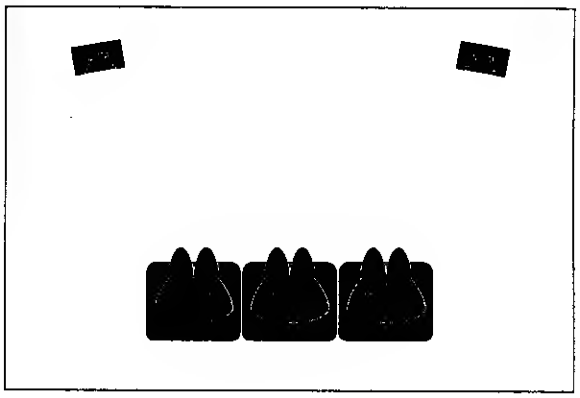
**Fixed Shelf**

**Removable Shelf**

## Positioning your speakers

You can get the best stereo effect by placing your speakers 6' to 12' apart along the same wall, with the main listening area midway between the 2 speakers.

- To enhance the stereo effect (especially if the speakers are more than 8' apart), rotate each speaker slightly toward the listening area.
- Placing the speakers against a wall will increase their bass output, but could also make them sound unnaturally 'thick' or 'heavy'. If this occurs, try moving them away from the wall a foot or so.



# Connecting your components

**Important:**
Please wait until you've connected all of the cables before plugging any of the components into AC wall outlets and turning them on.

## Connecting your speakers

Connect your speakers first. You'll have an easier time getting to the connections on the backs of the components before you connect all of the other cables.

1 Place the speakers in their approximate locations first, then leave a little extra speaker wire so you can fine-tune their locations.

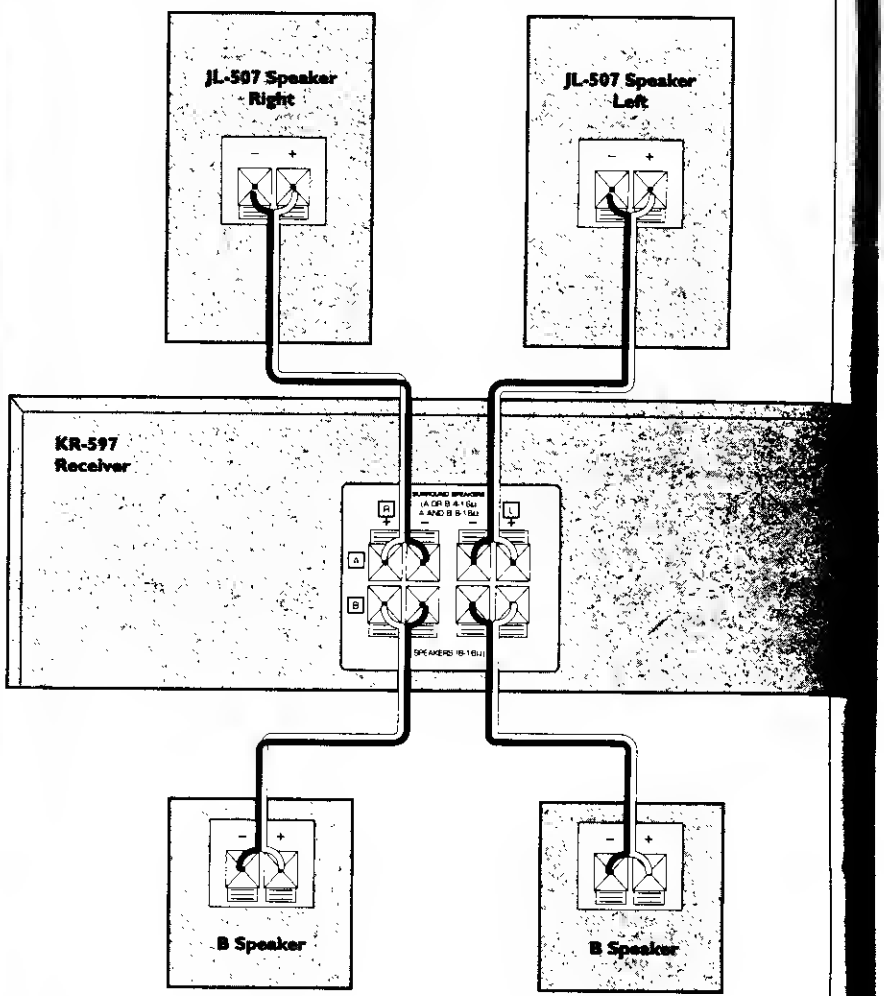
2 Use the speaker wire supplied with the speakers. If you need longer wire, buy speaker wire that is 18-gauge or thicker. Remember, the smaller the number, the thicker the wire; 18-gauge wire is thicker than 20-gauge

**A few tips**

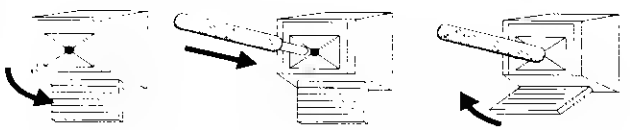
- To save you time, we've removed the insulation from the ends of the speaker wire we supplied.
- When connecting speaker wires, be sure to connect positive connections to each other and negative connections to each other. Connecting positive to negative (+ to - ) or negative to positive (- to +) can cause poor sound quality.
- Never allow the positive and negative speaker wires to touch each other. Touching wires can cause a short circuit, which could damage your electronics.

**Secondary Speakers**
If you're using an extra pair of speakers with your Spectrum System, connect them to the 'B-Speaker' jacks on the receiver.

**Left and right speakers**
Connect the left and right speakers to the 'A-Speaker' jacks on the receiver.




**To connect the wire:**



1 Unlock the lever 2 Insert the wire 3 Lock the lever

## Setting the Impedance Selector switch

The KR-597 has an impedance selector switch on the rear panel. This switch optimizes amplifier performance for use with either 2 or 4 speakers.

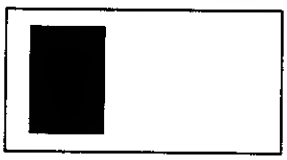
If you're using the speakers that came with your Spectrum system plus an additional pair connected to the receiver's "B" speaker terminals, leave the Impedance Selector set in the left-hand position.

If you're only using the speakers that came with your Spectrum system, move the Impedance Selector to the right-hand position.

**SPEAKERS**
**IMPEDANCE SELECTOR**

**A or B:**
**LESS THAN 8Ω**

**A and B:**
**8Ω OR MORE** ◀ ▶ **A or B:**
**8Ω OR MORE**

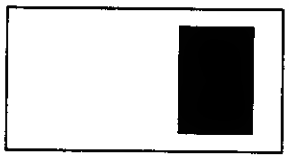


**If you're using the speakers that came with your Spectrum system plus a second pair, leave the switch in this position.**

**SPEAKERS**
**IMPEDANCE SELECTOR**

**A or B:**
**LESS THAN 8Ω**

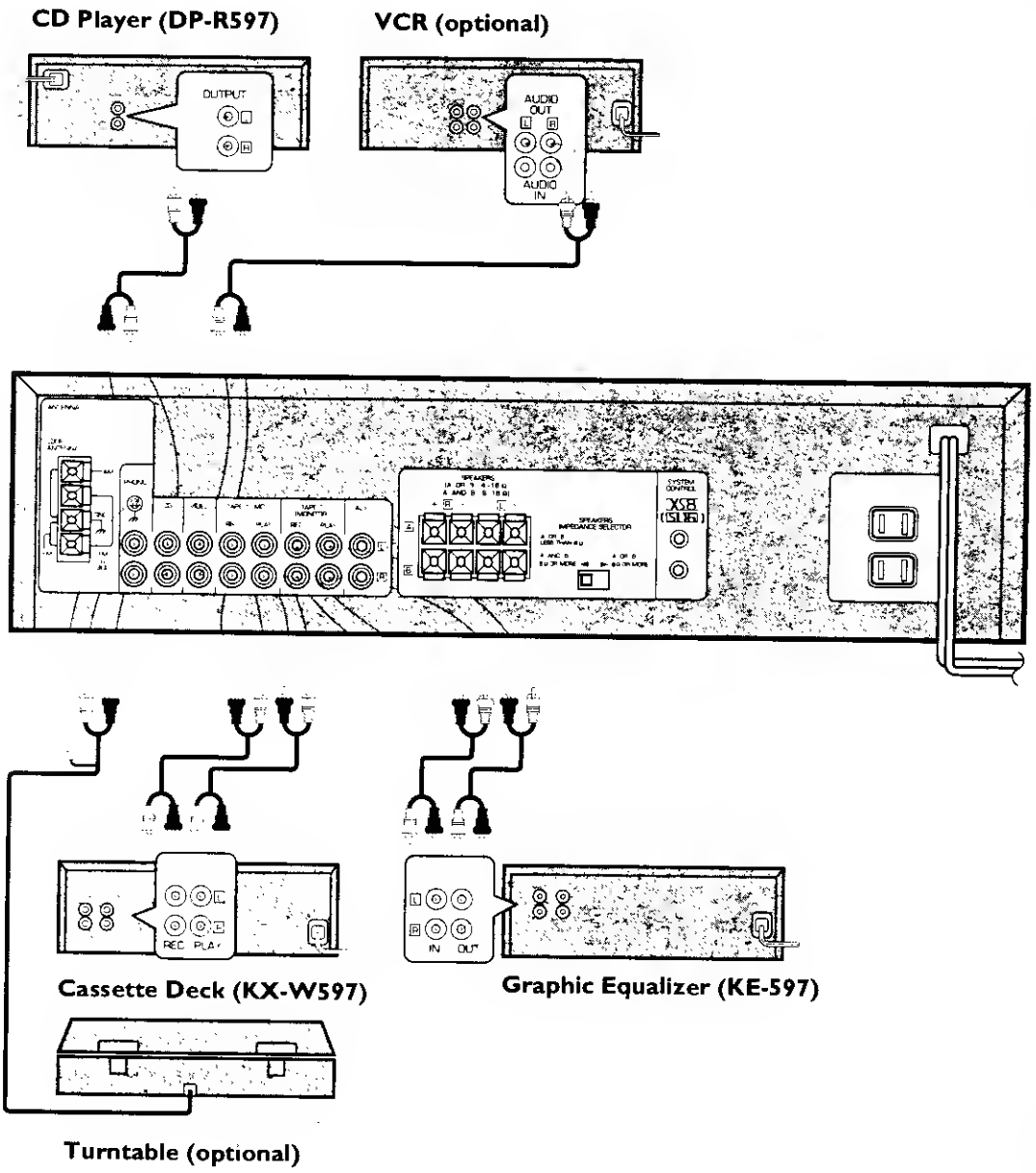
**A and B:**
**8Ω OR MORE** ◀ ▶ **A or B:**
**8Ω OR MORE**



**If you're only using the speakers that came with your Spectrum system, move the switch to this position.**

## Connecting your CD player, cassette deck, and optional turntable or VCR

Use the cables that came with the audio and video components. You can connect any turntable that has a magnetic phono cartridge.



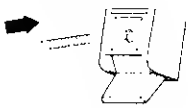
# Connecting your antennas

The quality of your FM/AM reception depends on how well you place your antennas. So please follow the instructions carefully.

### Connecting the antenna wires to the antenna jacks

1 Unlock lever

2 Insert wire

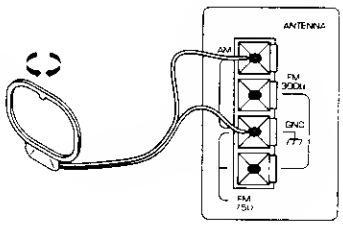


3 Lock lever

### Using the AM indoor loop antenna (supplied)

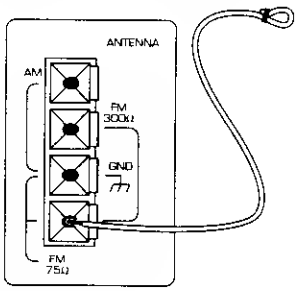
Place the antenna as far away as possible from the main system, television, speaker wires and power cords.

Rotate the antenna until you get the best reception.




### Using the FM indoor antenna (supplied)

Use this antenna until you can install an outdoor antenna. When you do, remove the indoor antenna.




1 Remove the insulation from the wire tip, and twist the wire tightly to get rid of any loose strands.

2 Connect the end of the wire to the left-most antenna jack on the receiver.

3 Fully extend the antenna, and place it along a wall or bookshelf.

4 Adjust the antenna to find the position that provides the best reception.

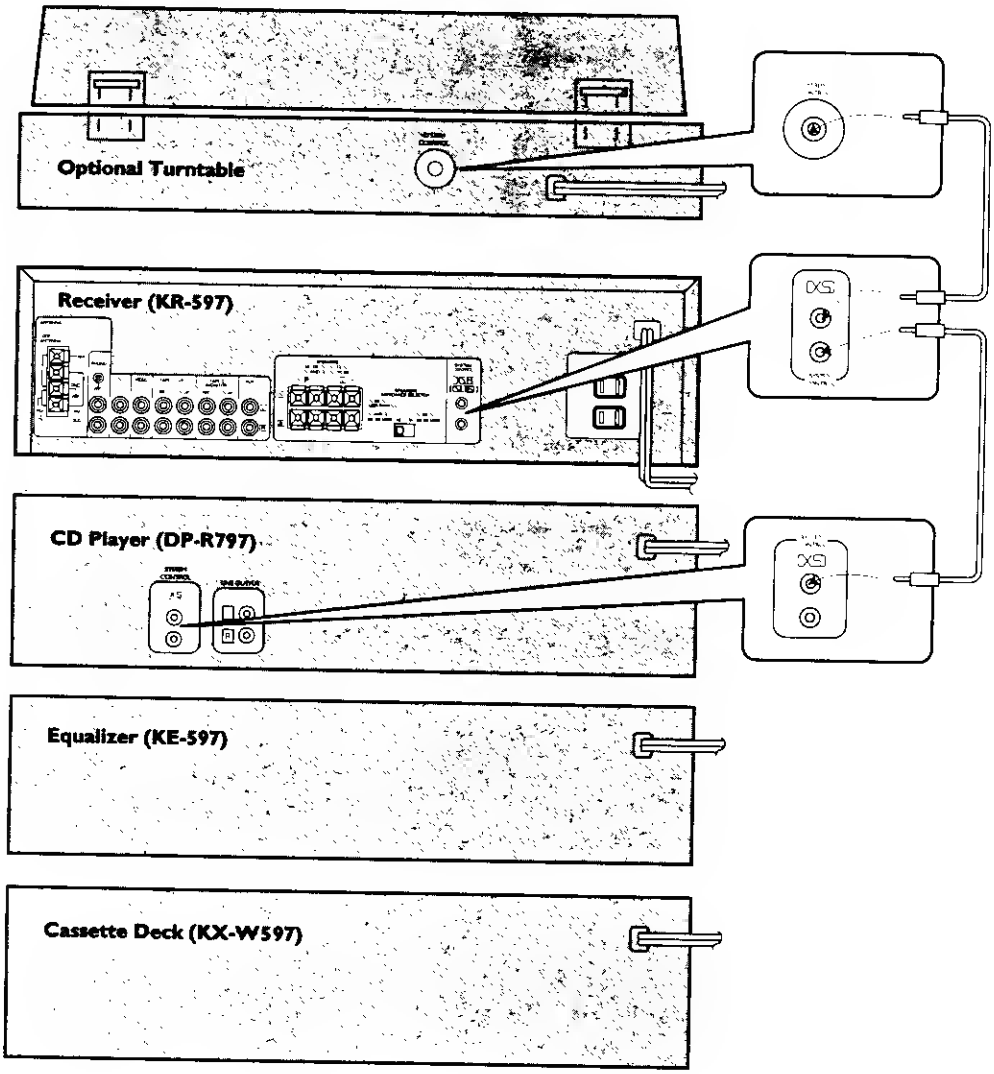
5 Attach the looped end to the wall or bookshelf.

### Using an FM outdoor antenna (optional)

For the best reception and sound quality, we recommend using an outdoor FM antenna. Since most outdoor antennas use either 75 ohm or 300 ohm connections, your Spectrum System's receiver provides connections for both. Contact your local electronics dealer/installer for more information.

## Connecting the system control cables

Connect the system control cables as shown below. Be sure to push the plugs all the way in.



# Plugging in your power cords

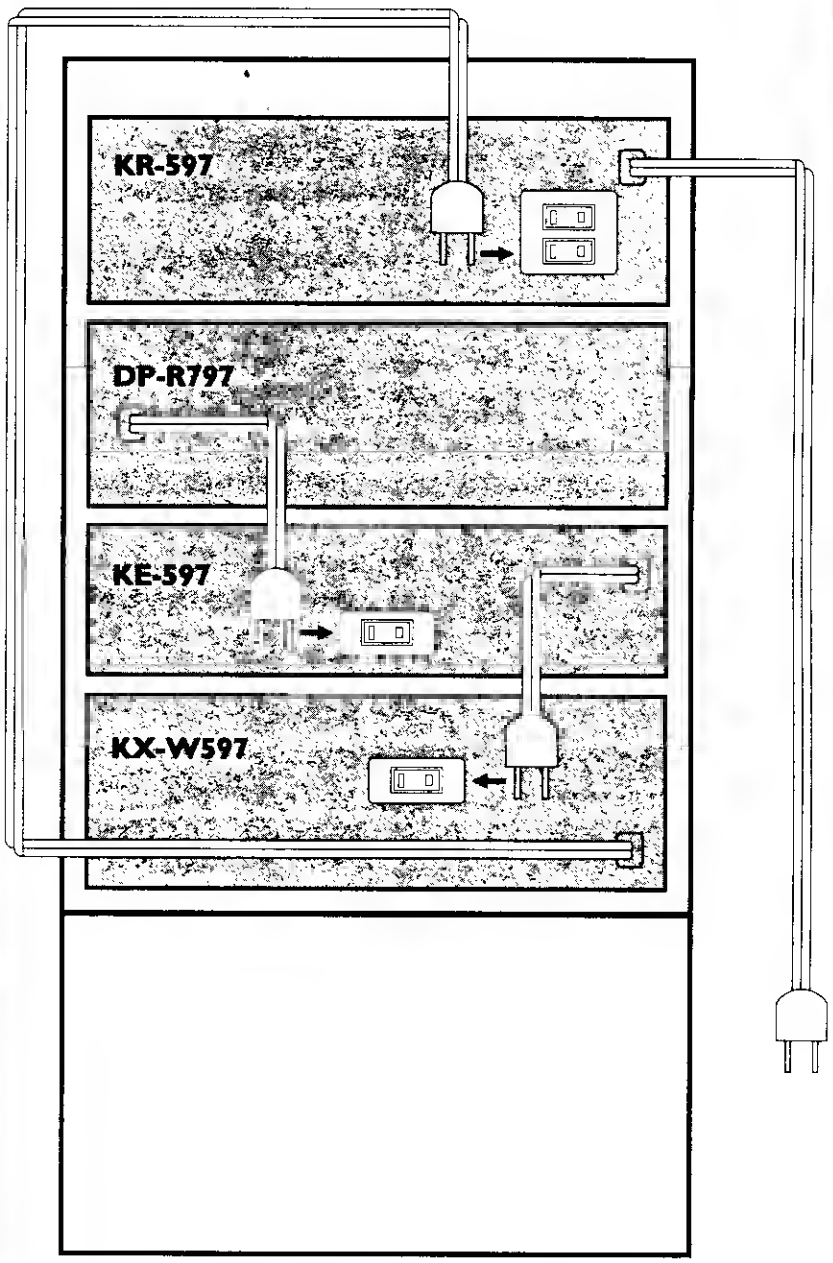
Important: Make sure you follow these instructions carefully when you plug in the power cords. If the connections are wrong, they could cause electrical overload and fire.

1 Plug the power cord of the CD player into the accessory outlets on the back of the equalizer.

2 Plug the power cord of the equalizer into the accessory outlet on the back of the cassette deck.

3 Plug the power cord of the cassette deck into one of the accessory outlets on the back of the receiver.

4 Plug the power cord of the receiver into the wall AC outlet.

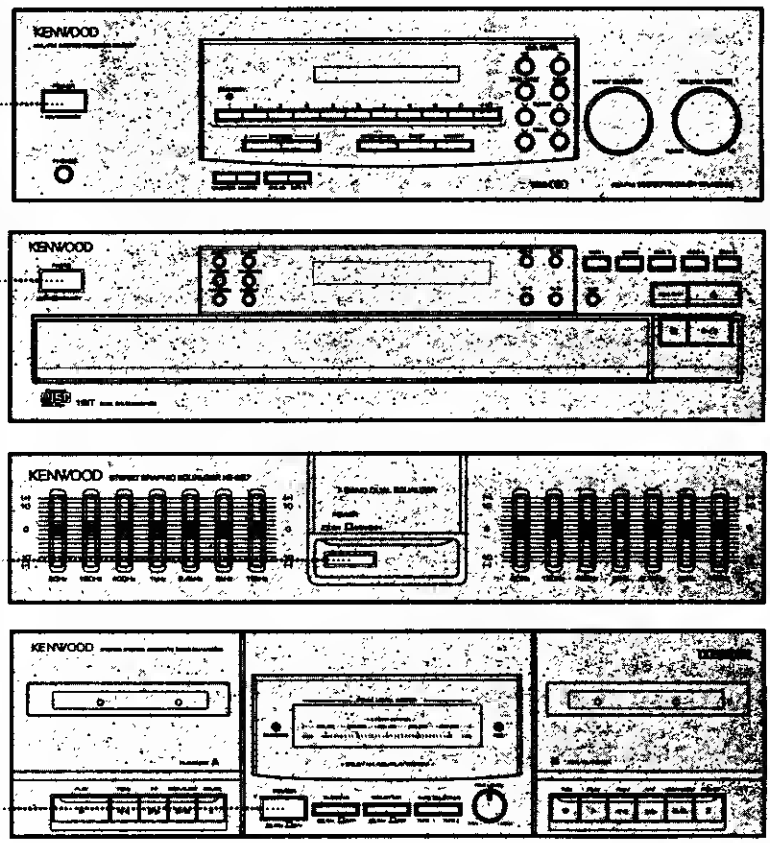


# Turning ON the power

If you've connected all of the power and system control cables as we've shown, you can turn on the power to the entire system from the receiver.

1 Press the power switch on the receiver (or the POWER button on the remote) to turn the entire system ON and OFF.

2 Press the power switches of the CD-player, equalizer and cassette deck only when you turn the system ON for the very first time, and leave them on.



## CONGRATULATIONS!

Your Spectrum System is ready to go! Now, look at the 'Using your Kenwood Spectrum Audio System' section to operate your system. Have fun!

# Warranty

Write the serial numbers (they're on the back of each unit, along with the model number) in the space below. If you need to call your dealer for information or service, you'll need the model and serial numbers. We suggest you keep your sales receipt as proof of purchase to validate your warranty coverage

See the complete text of the warranty below. Please read it carefully.

| Model number | Serial number |
|---|---|
| KR-597 | |
| DP-R797 | |
| KE-597 | |
| KX-W597 | |
| JL-507 | |

## Kenwood Limited Warranty

**Spectrum Systems**
Kenwood is proud of its audio equipment and stands behind it. For that reason, we offer you the owner of a new Kenwood product the following warranty

**Warranty period: One year parts & labor**
This Kenwood product is warranted for the stated period from the date of the original purchase

**Scope of warranty**
Except as specified below this warranty covers all defects in material and workmanship in Kenwood products The following are not covered by the warranty

1 Voltage and/or line frequency conversions

2 Periodic check-ups which do not disclose any defects covered by the warranty

3 Units on which the serial number has been defaced modified or removed

4 Damage or deterioration

   a Occuring to any external part including but not limited to appearance items such as knobs speaker grilles and batteries

   b Resulting from accident misuse abuse neglect unauthorized product modification or failure to follow instructions contained in the owners manual

   c Resulting from repair or attempted repair by anyone not authorized by Kenwood

   d Resulting from installation of parts or accessories that do not conform to the quality or specifications of the original parts or accessories.

   e Occurring during shipment (claims must be presented to the shipper)

5 Product purchased or serviced outside the United States and its territories, unless the product is purchased through the U.S.A. Military Exchange Service

**Who is protected**
This warranty is extended only by the original purchaser. A purchase receipt or other proof of date of original purchase will be required before warranty service is rendered

**What we will pay for**
We will pay all labor and material expenses for covered items. Payment of shipping charges is discussed in the next section of this warranty.

**How to obtain warranty service**
If your Kenwood product requires service.

1 Take or ship it to any Kenwood Authorized Service Center along with a complete description of the problem. If you are uncertain as to whether a Service Center is authorized, please call "1-800-KENWOOD" (1-800-536-9663) for the nearest service center in the continental U.S.A.).

2 Although you must pay any shipping charges if it is necessary to ship the product for warranty service, we will pay the return shipping charges if the repairs are covered by the warranty.

3 Whenever your units are taken or sent for warranty service, you must include a copy of the original dated sales receipt as proof of warranty coverage

**LIMITATION OF IMPLIED WARRANTIES**
ALL IMPLIED WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR PATICULAR PURPOSE, ARE LIMITED IN THE DURATION TO THE LENGTH OF THIS WARRANTY.

**EXCLUSION OF CERTAIN DAMAGES**
KENWOOD'S LIABILITY FOR ANY DEFECTIVE PRODUCT IS LIMITED TO THE REPAIR OR REPLACEMENT OF SAID PRODUCT, AT OUR OPTION, AND SHALL NOT INCLUDE DAMAGES OF ANY KIND, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS AND/OR DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATIONS AND EXCLUSIONS MAY NOT APPLY TO YOU

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

If a problem develops during or after the Limited Warranty Period, or if you have questions regarding the operation of the product, you should contact your Kenwood Athorized Dealer or Authorized Service Center. If the problem or your question is not handled to your satisfaction, please contact our Customer Relations Department at the address below

**Kenwood Service Corporation**
**PO Box 22745**
**Long Beach, CA 90801-5745**
**USA**

**For your nearest**
**Kenwood Authorized Service Center, call:**

**1-800-536-9663**
**24 hours a day, 7 days a week**